Market Operations Weekly Report - Week Ended 15 November 2026

Overview

South Island hydro storage remains well above average at 132%, while North Island storage increased to 102% from 81% the week prior with significant inflows, moving above average for this time of year.

In this week's insight we look at some key findings from the winter 2026 review paper published by the System Operator last week.

Security of Supply

Energy

Above average inflows last week meant that National hydro storage increased to 129% from 126% the week prior. South Island storage decreased slightly from 133% to 132% while North Island storage increased from 81% to 102% with significant inflows in the North Island last week.

Capacity

Residual generation capacity was healthy last week with all morning and evening peaks well above 1,000 MW of residual. The lowest residual was 1,221 MW on the evening of Monday 9 November coinciding with the highest demand peak of the week.

The N-1-G margins in the NZGB forecast are at healthy levels through to early January. Within seven days we monitor these more closely through the market schedules. The latest NZGB report is available on the NZGB website.

Electricity Market Commentary

Weekly Demand

Total demand decreased last week to 741 GWh from 770 GWh the week prior. The highest demand peak occurred at 5:30 pm on Monday 9 November at 5,481 MW with cooler temperatures in parts of the country.

Weekly Prices

Wholesale electricity spot prices decreased last week with the average Ōtāhuhu price down to $46/MWh from $94/MWh the previous week. The Ōtāhuhu price peaked at $333/MWh at 5:00 pm on Monday 9 November, with low North Island wind generation coinciding with a period of constrained HVDC transfer.

Inter-island energy price separation occurred at times throughout the week, particularly during periods of low North Island wind generation and when lower North Island grid outages reduced northward HVDC transfer limits.

Generation Mix

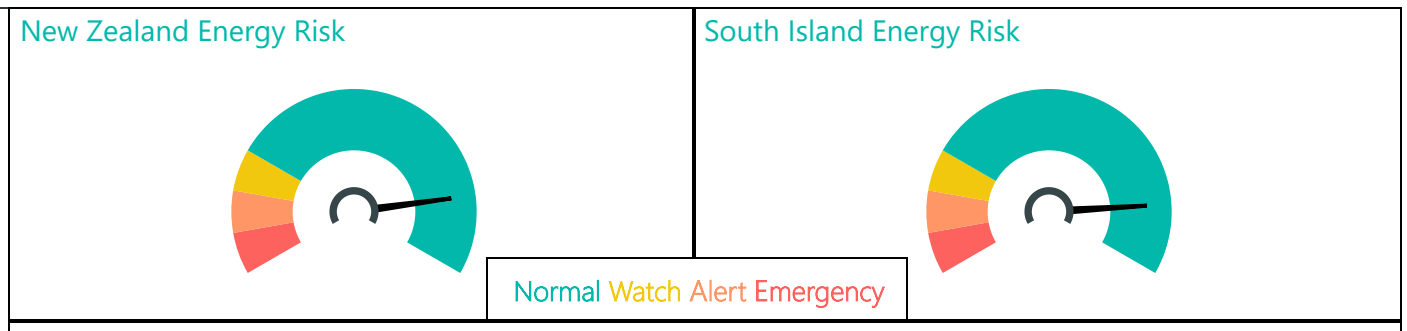
Hydro generation was above average last week at 62% consistent with its share of the mix during the week prior. Solar generation contributed 3%. The geothermal share decreased to 21% last week from 23% the week prior as some geothermal units were on outage. Wind generation was above average last week at 12% of the mix while thermal generation was below average at 1.5% of the mix.

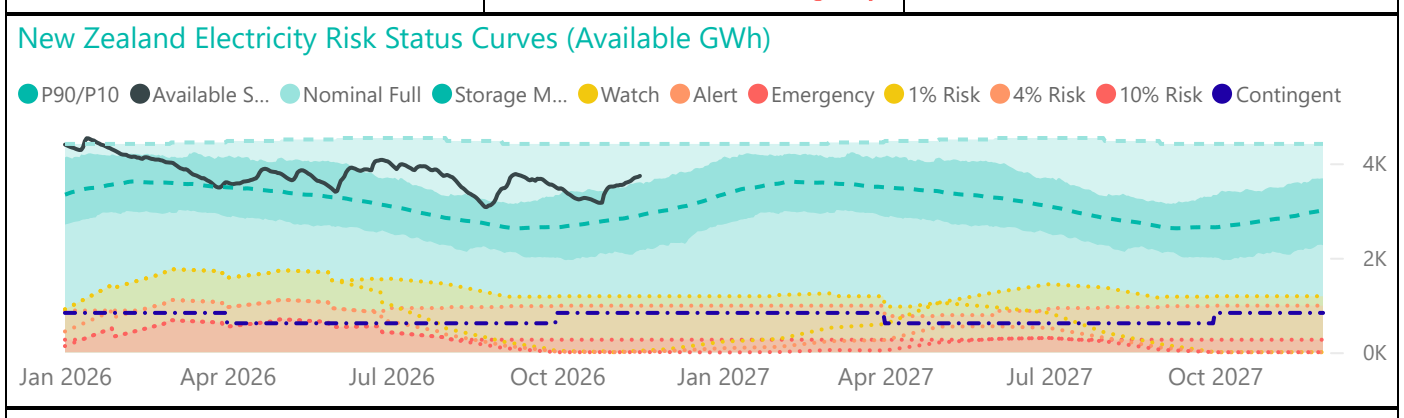
HVDC

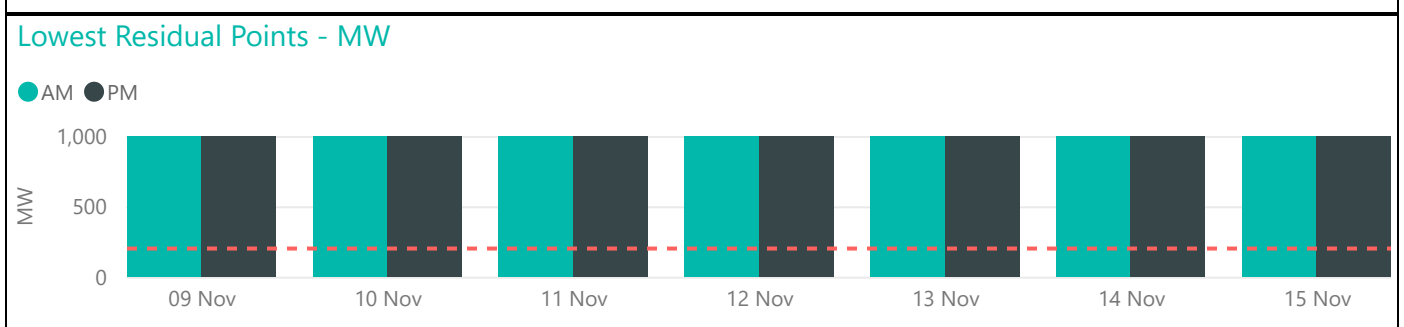
HVDC flows last week were almost entirely northward, consistent with above average South Island hydro storage. There was a short period of southward transfer overnight between 11 and 12 November with low demand and high North Island wind generation. In total 103 GWh was transferred north.

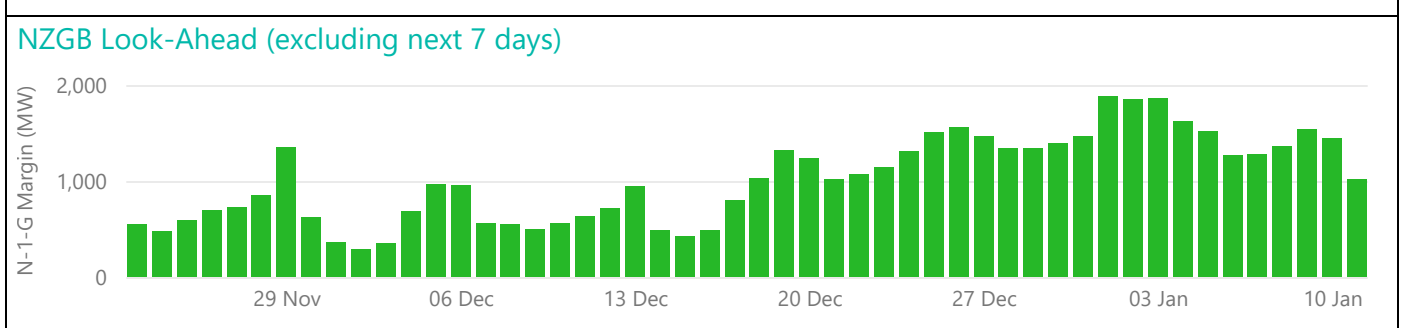
Publications

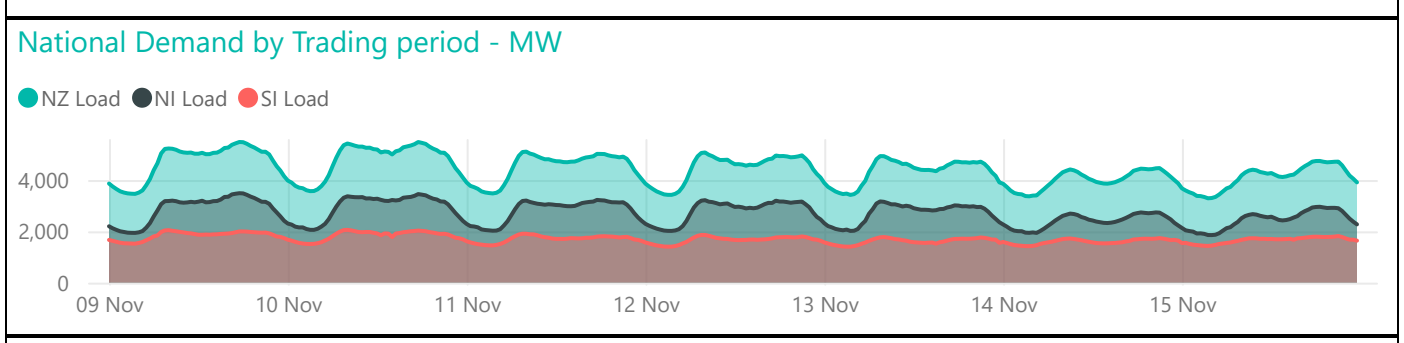
Last week the System Operator published a paper on Winter 2026: Industry coordination in low residual situations. This week's insight looks at some key observations and we invite you to read the full paper here.

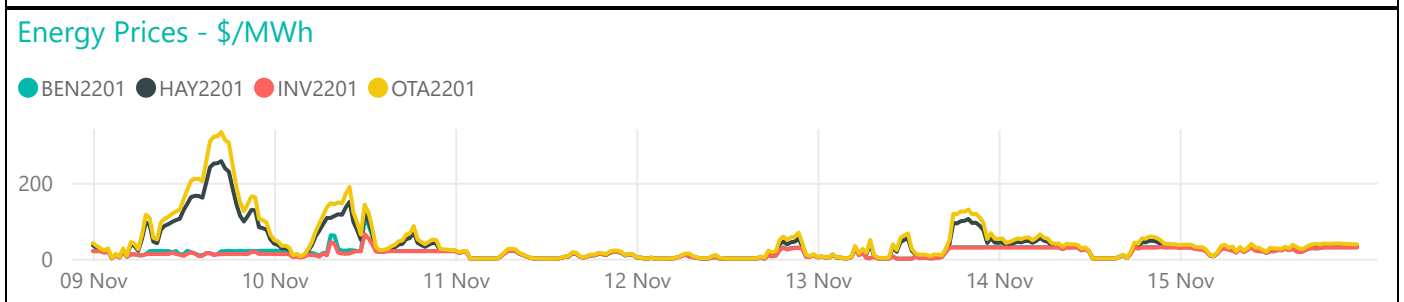


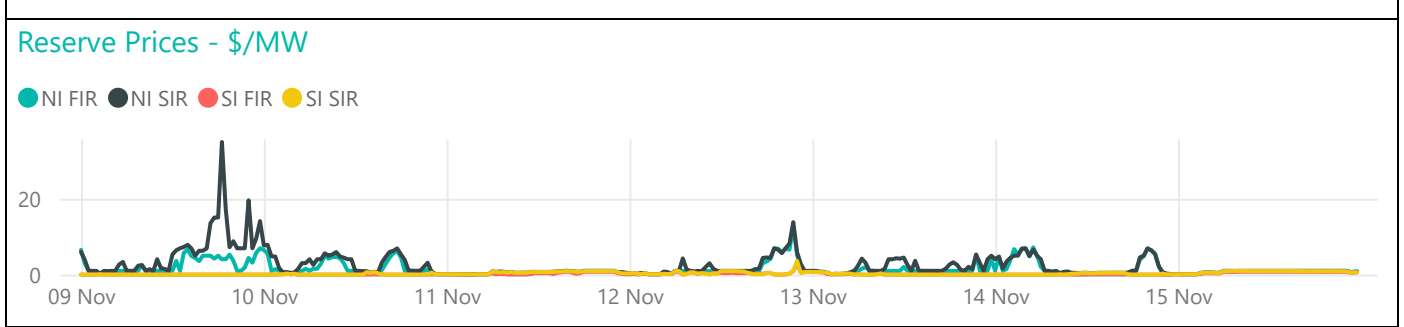


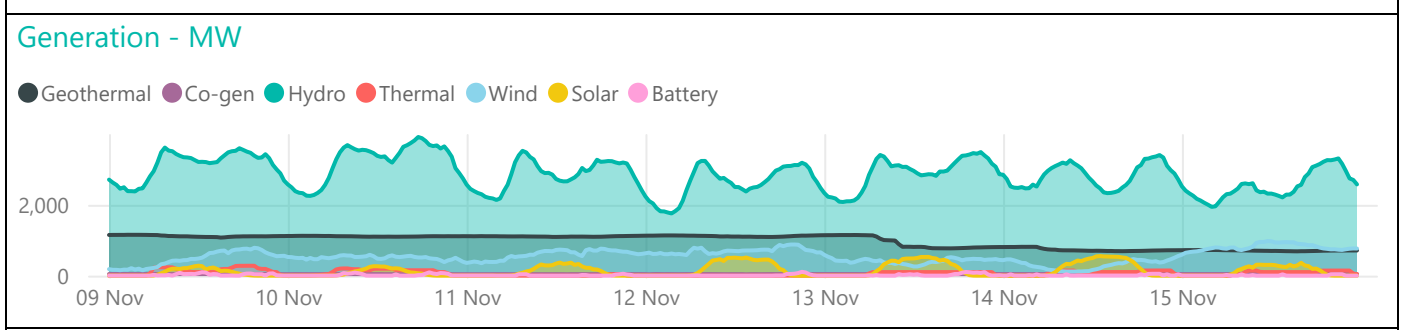


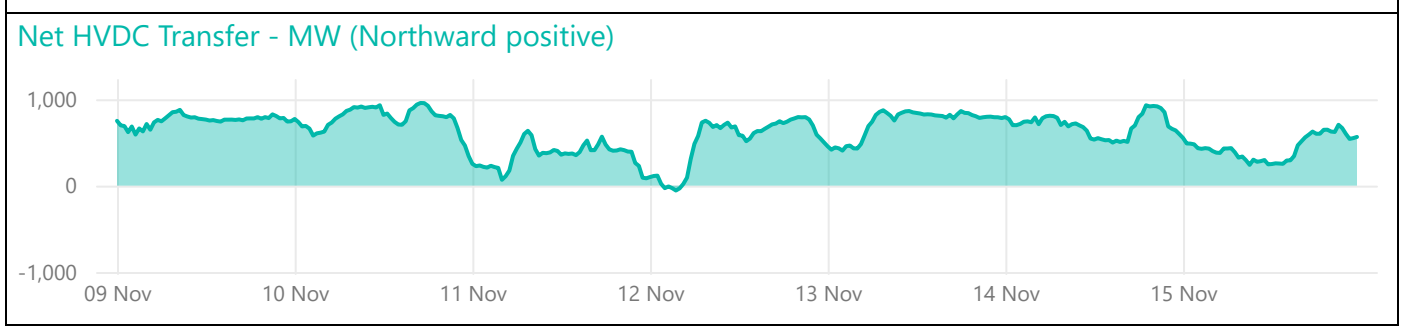












Weekly Insight - What winter 2026 tells us about managing low residual situations

Last week the System Operator published a review of industry coordination during low residual situations, providing a behind-the-scenes look and some learnings from some of the tightest periods on the power system during winter 2026. The full report is available here.

One notable feature of winter was the effect of sustained cold weather on electricity demand. During late July and early August, very cold conditions across the country resulted in exceptionally high morning and evening demand peaks, including eight of New Zealand's 10 highest on record. The most significant was the morning of 6 August, when half-hour average demand reached a record 7,415 MW between 7:30 and 8:00 am, with instantaneous demand reaching 7,470 MW at 7:50:08 am. This was almost 300 MW higher than previous record peaks in 2021 and 2023.

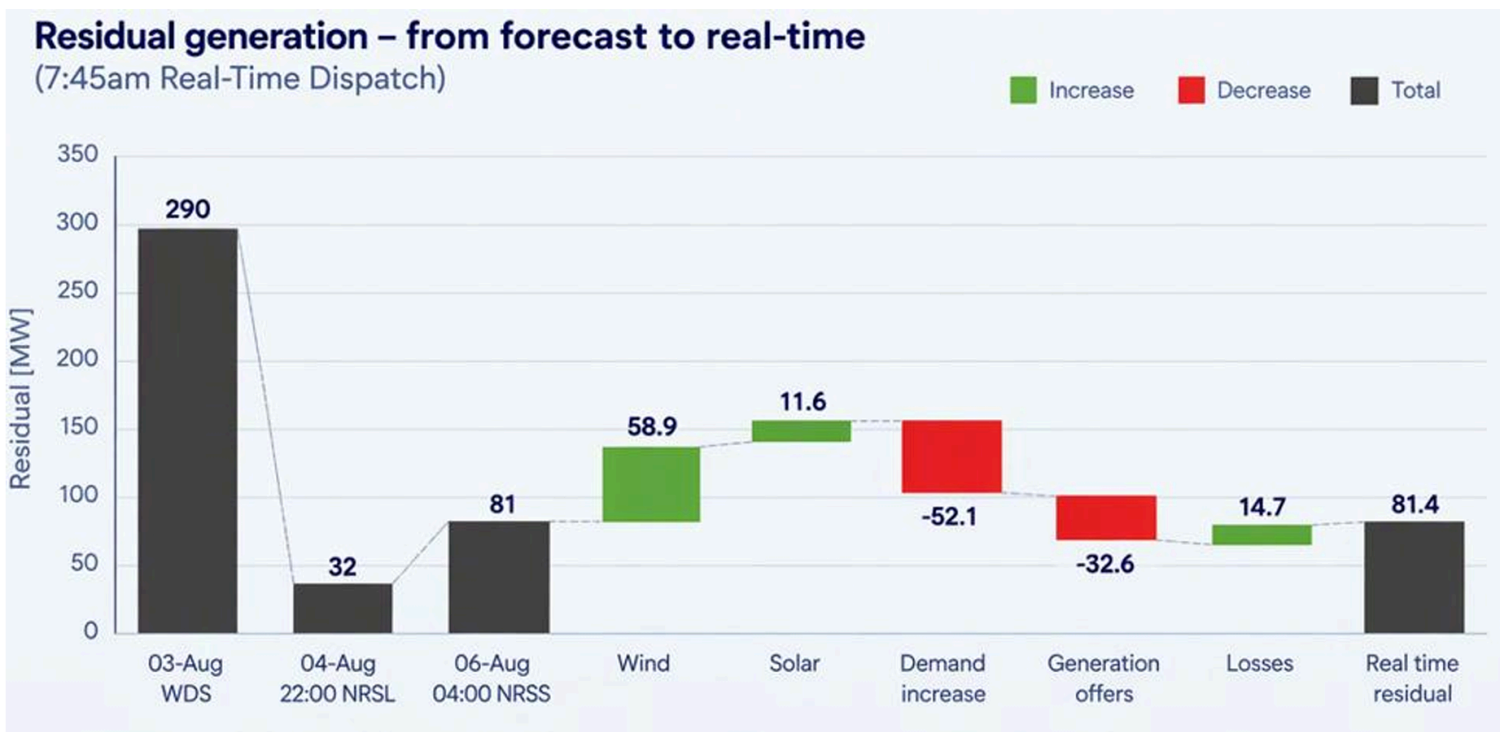
The record was driven by very cold weather nationally, including exceptionally cold conditions in Auckland and Northland. We saw signs that peak electricity demand is becoming more sensitive to colder weather, with the increasing use of heat pumps in homes being one possible contributor. This growing weather sensitivity could produce even sharper peaks when cold conditions affect much of the country at once. This makes accurate forecasting, flexible resources, and coordinated industry responses increasingly important.



Forecasts improved closer to real time

One challenge in preparing for 6 August was understanding how the balance between expected demand and available generation would change as the event approached. Our initial Week-ahead Dispatch Schedule indicated a residual of 290 MW. As updated information became available, that tightened significantly: to 32 MW in the Non-Response Schedule Long (NRSL) and 81 MW in the Non-Response Schedule Short (NRSS).

In the end, the actual minimum residual in real time was identical to this at 81.4 MW, but the similar final number does not mean everything happened as forecast. More wind and solar generation and lower losses increased the residual, while higher-than-expected demand and lower generation offers pushed it the other way. This highlights the value of increasingly accurate information as we approach real time, while also reinforcing the need to remain flexible as system conditions change.



Demand response made a material difference

That flexibility was evident in industrial demand response. Around 65–75 MW helped ease conditions in real time on 6 August. Industrial customers had updated their bids ahead of the event, giving the System Operator better visibility of what to expect. This shows that managing tight conditions is not solely about bringing on more generation. Flexible demand can also contribute, particularly when participants provide clear and timely information about how they expect to respond. As more large electrified loads connect, understanding their operating characteristics and potential flexibility will become increasingly important.

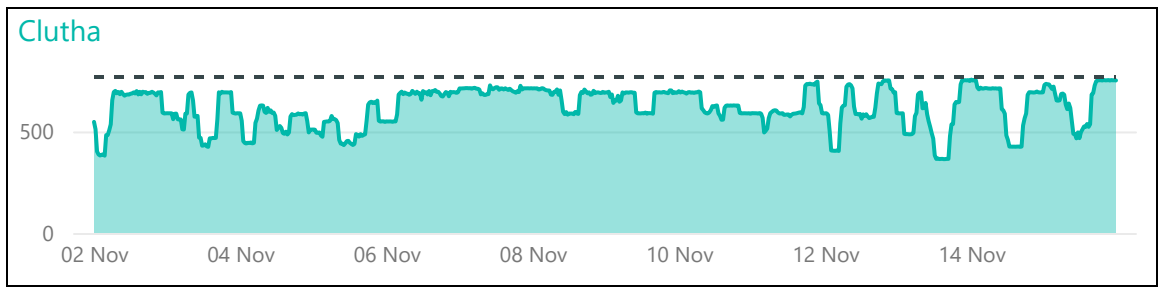
What does this tell us?

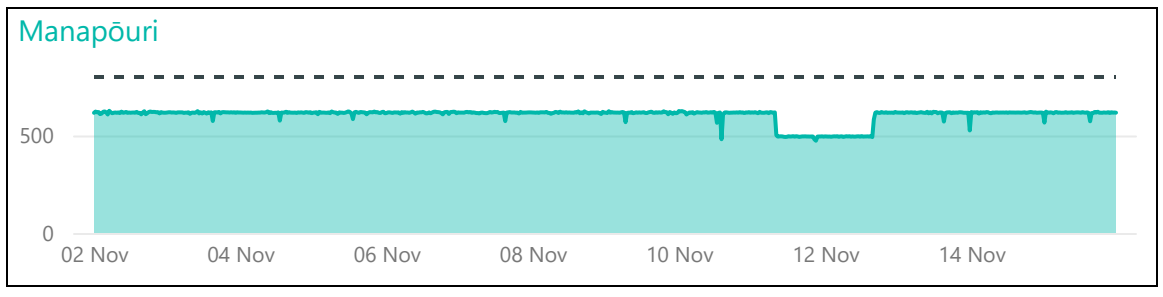
Winter 2026 reinforced that security of supply is a collective outcome. A more weather-dependent system requires good forecasting and timely information, along with flexible supply and demand that can respond as conditions change.

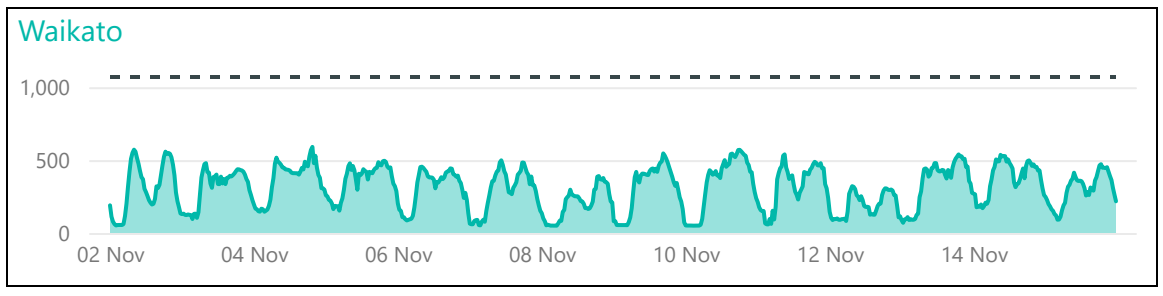
The 6 August situation shows why no single technology or intervention is the answer. Effective coordination across the electricity sector, and participants being able to respond when needed, will be increasingly important to keeping the power system secure.

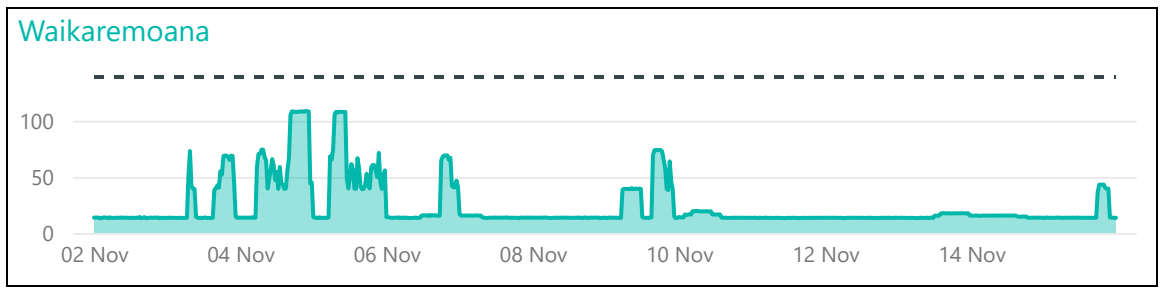
Generation Breakdown - Last Two Weeks

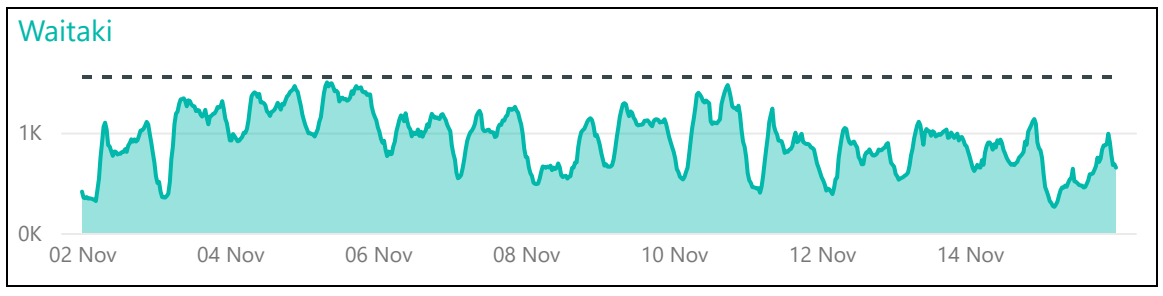
Measured in MW and displayed at trading period level for last 14 days

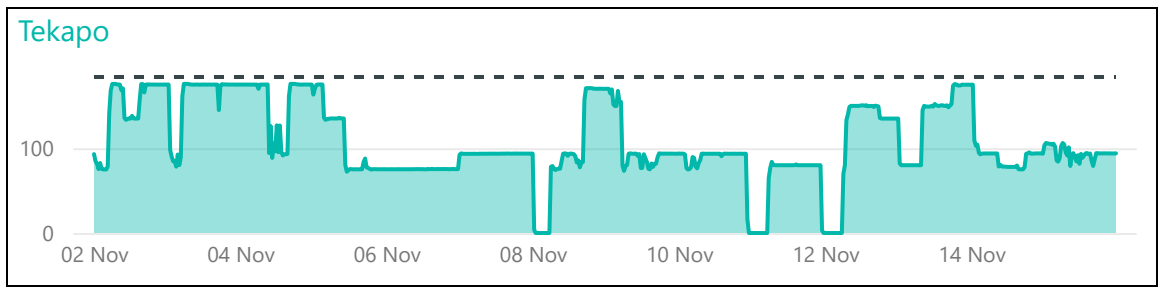


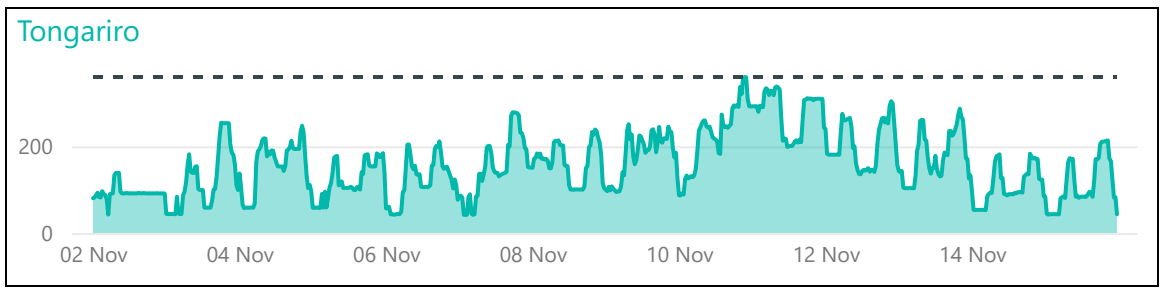


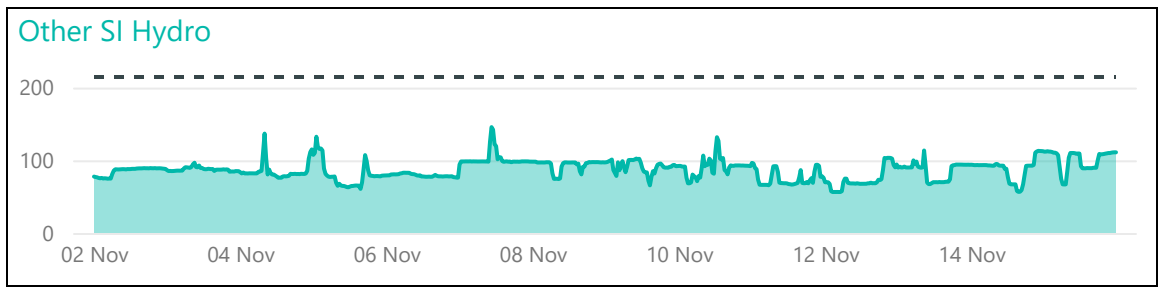


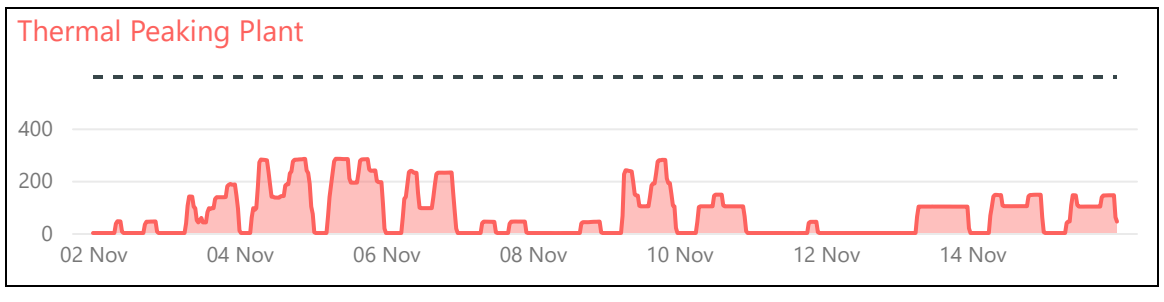


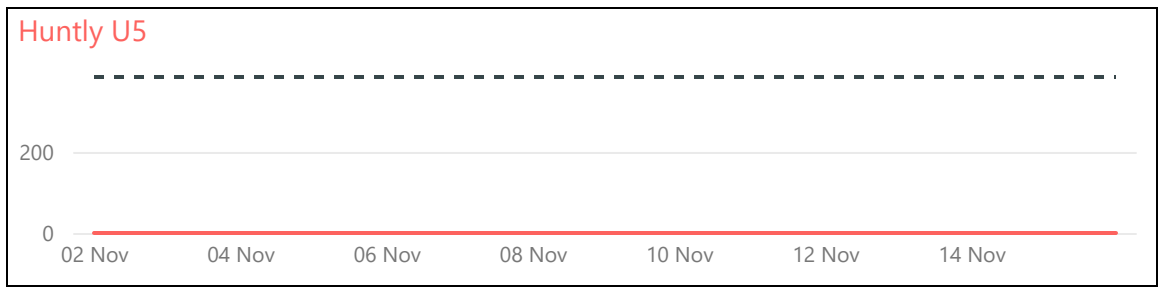


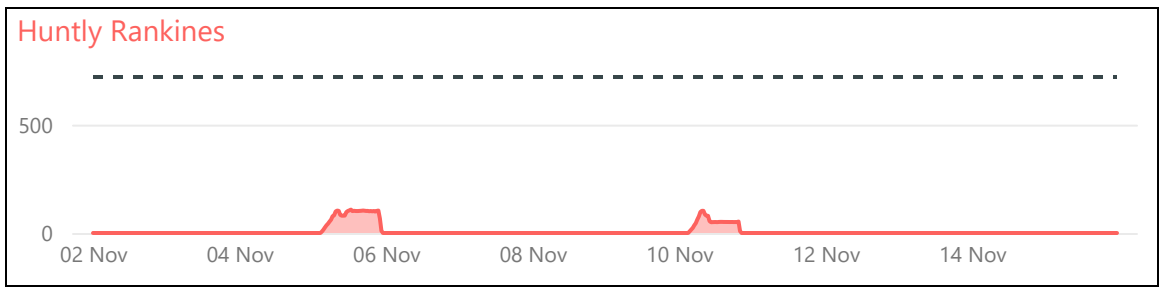


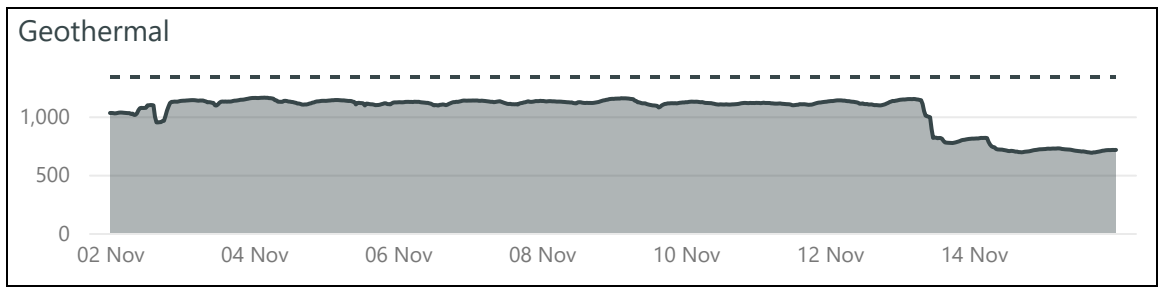


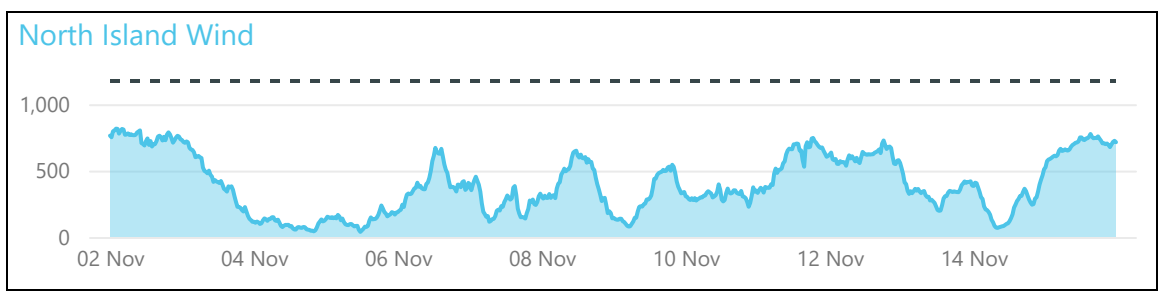


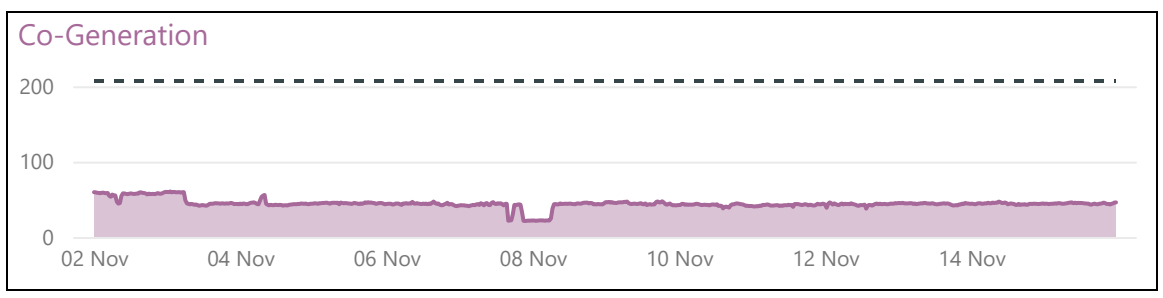


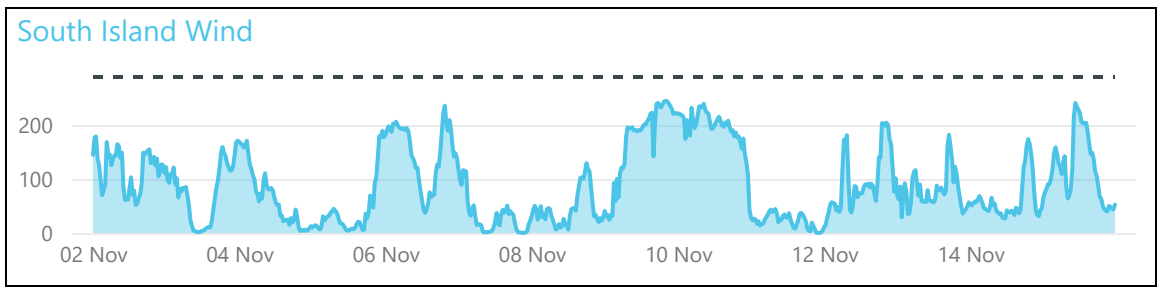


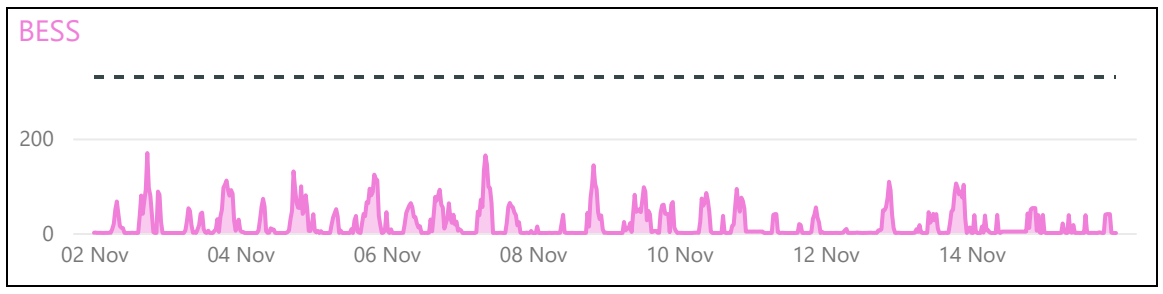


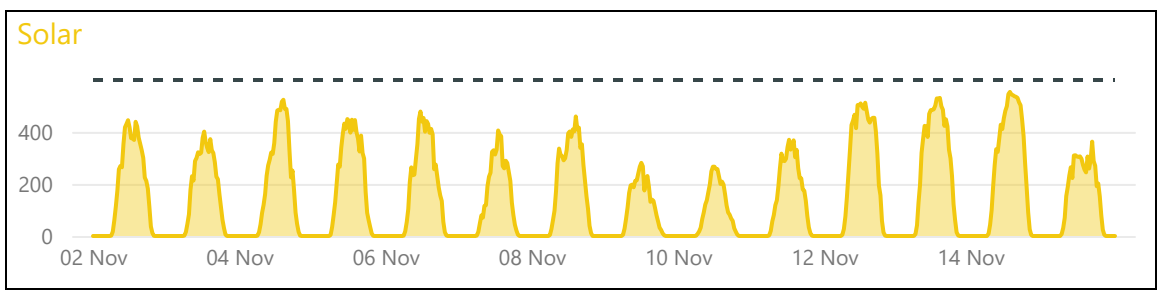






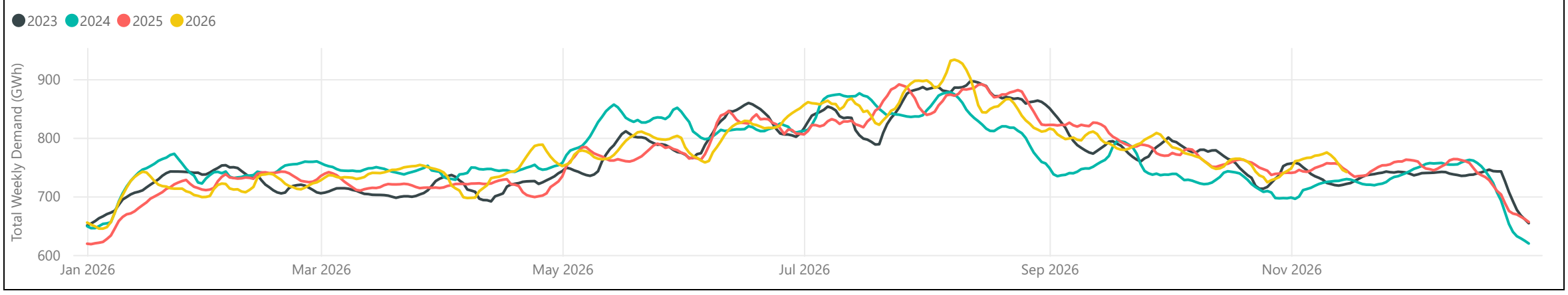




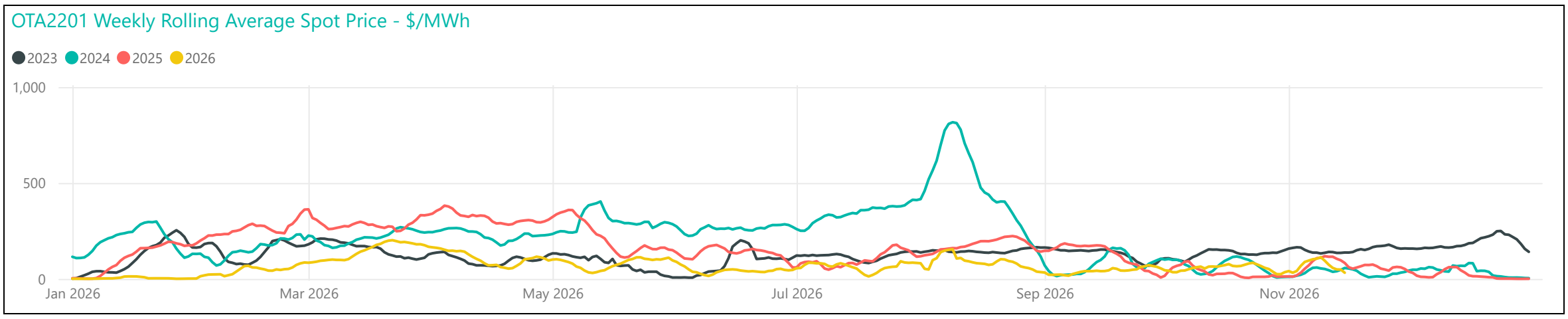


Weekly Profiles

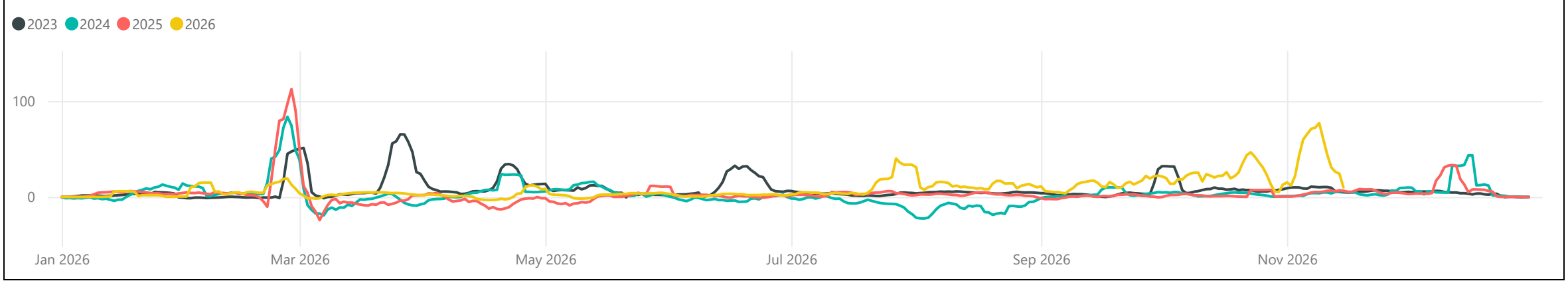
National Weekly Demand - GWh - 7 Day Rolling



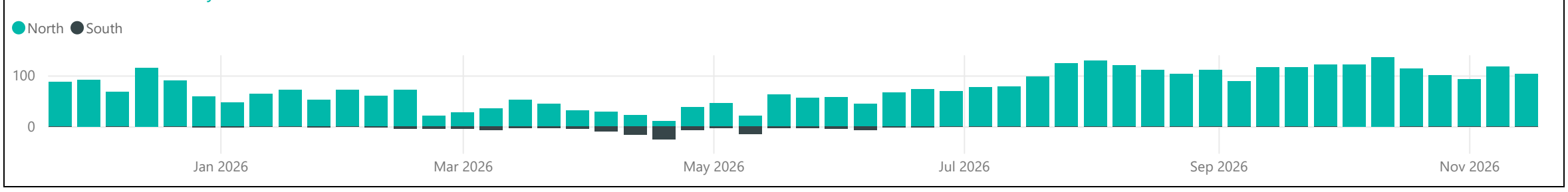
OTA2201 Weekly Rolling Average Spot Price - $/MWh



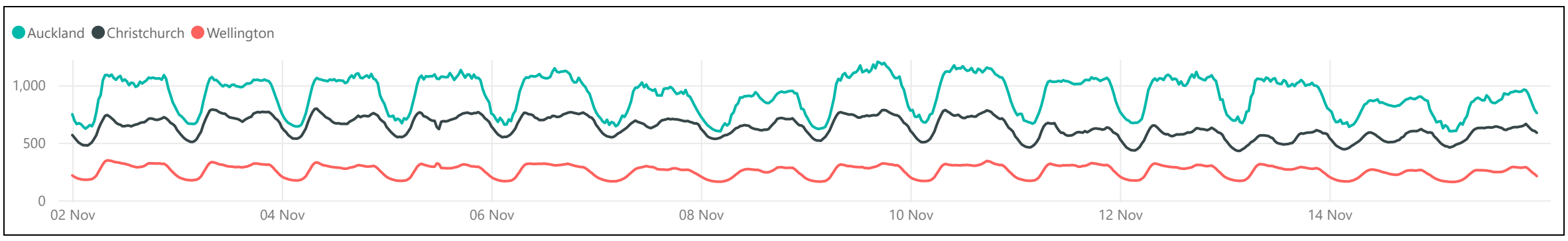
Weekly Rolling Price Separation (HAY2201 - BEN2201) - $/MWh



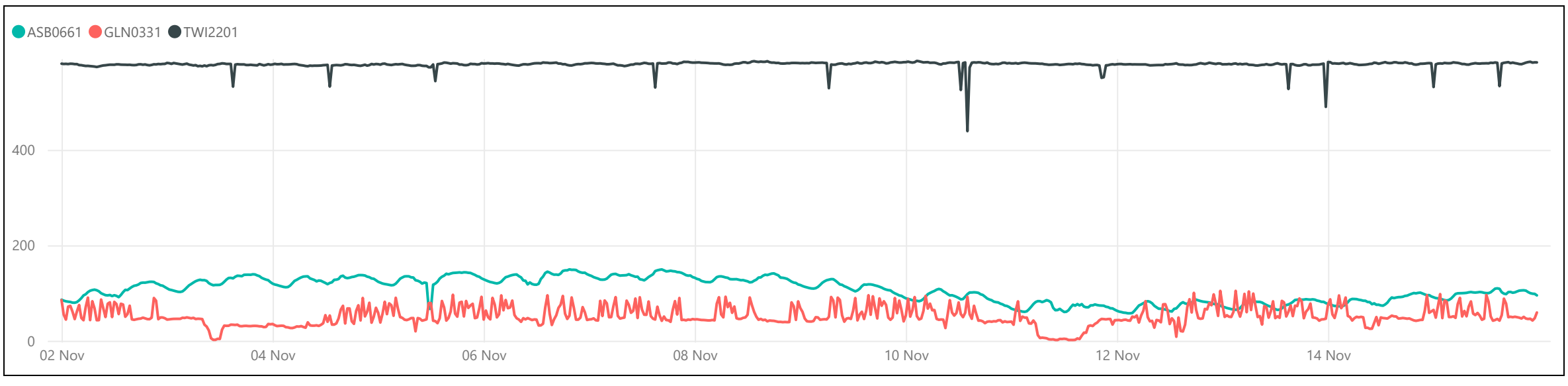
HVDC Transfer - Weekly GWh



Conforming Load Profiles - Last Two Weeks *Measured in MW shown by region*



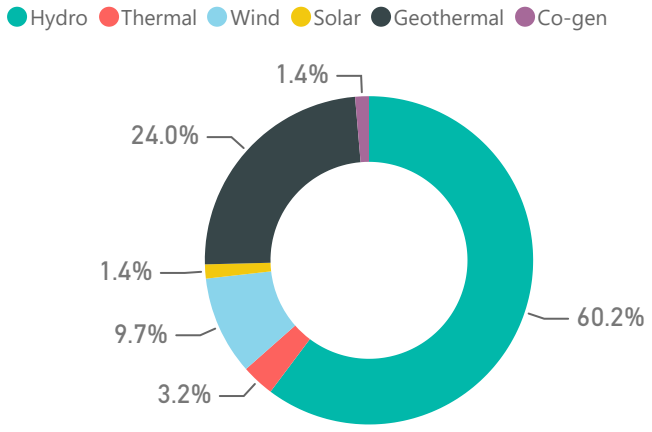
Non-Conforming Load Profiles - Last Two Weeks *Measured in MW shown by GXP*



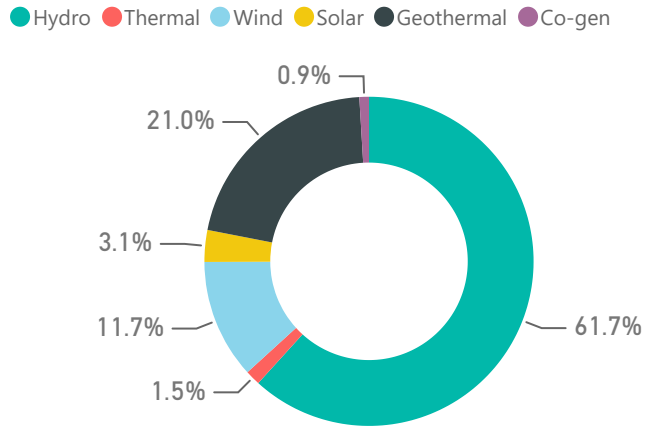
TRANSPOWER

Generation Mix

Last 52 Weeks Generation Mix - Weekly GWh



Last 7 Days Generation Mix - Weekly GWh



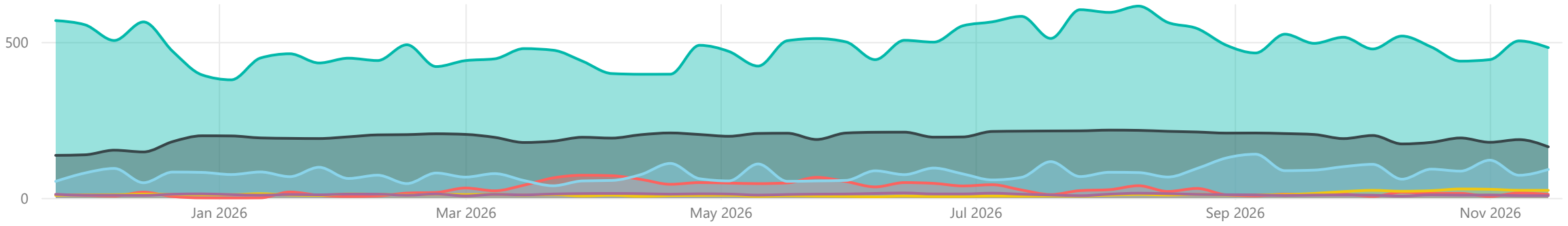
Average Metrics Last 7 Days

Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
98%	22,306	28.0

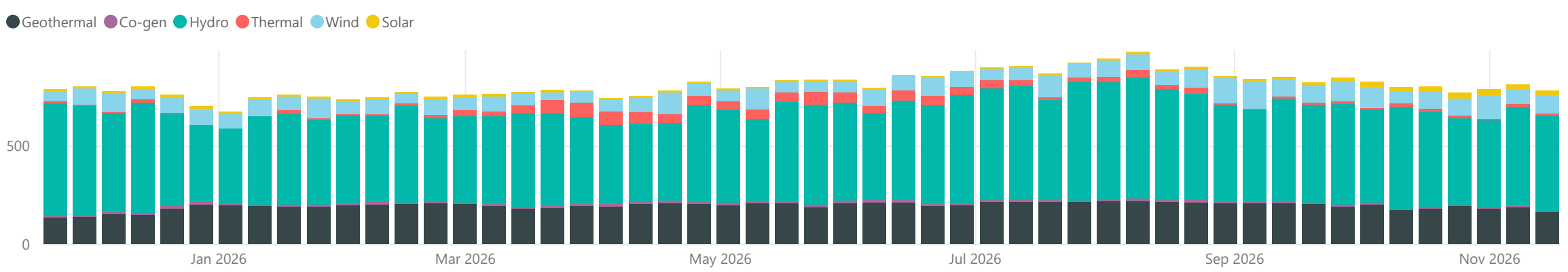
Average Metrics Last 52 Weeks

Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
95%	34,265	41.8

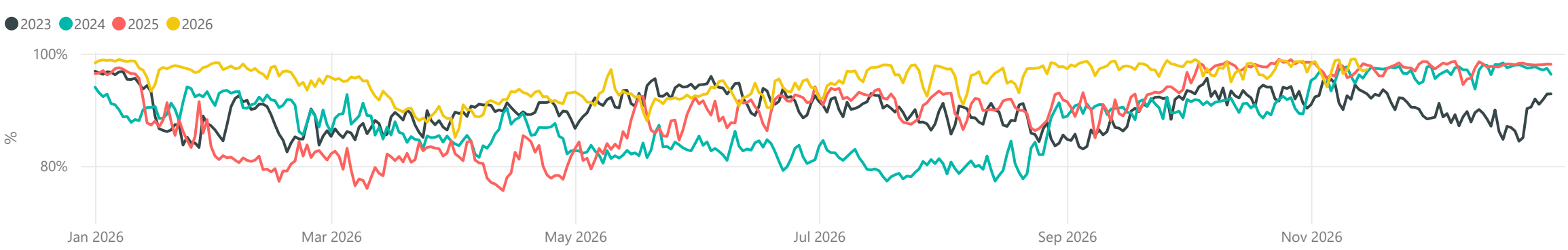
Weekly Generation Mix - GWh



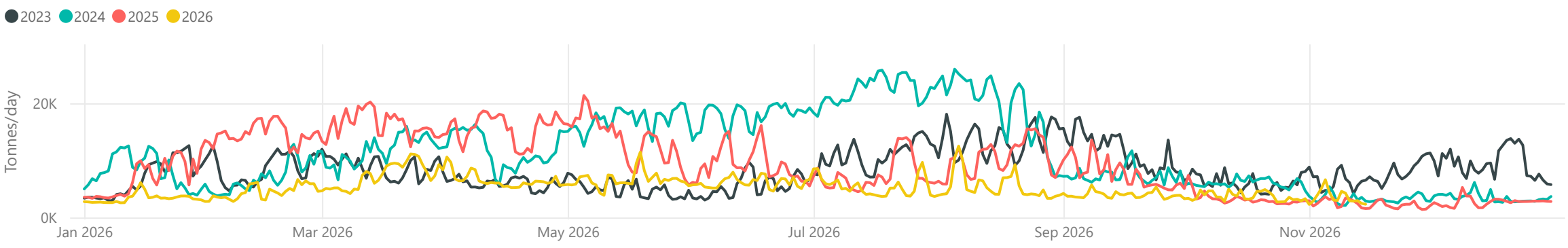
Weekly Generation Mix - GWh



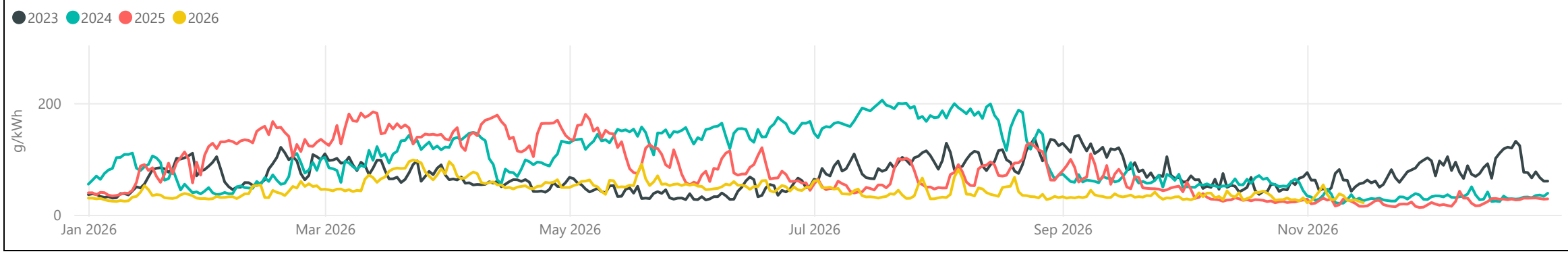
NZ Renewable Percentage



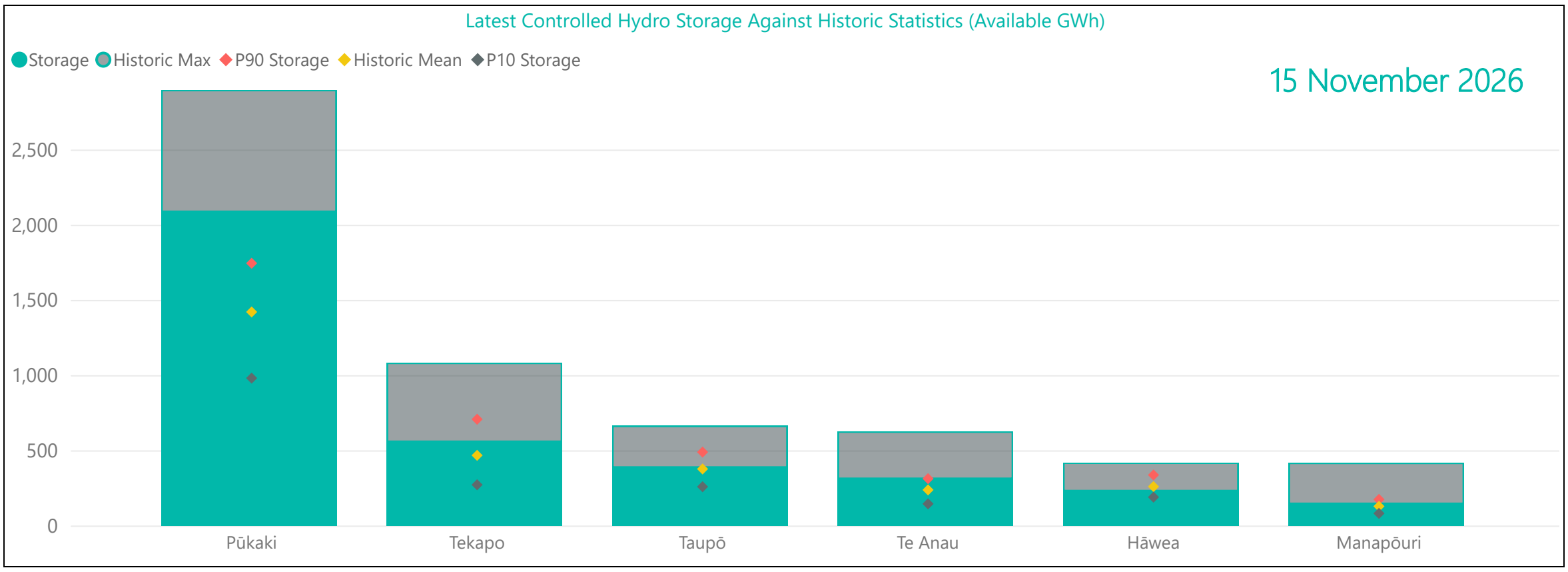
CO2 Tonnes/Day

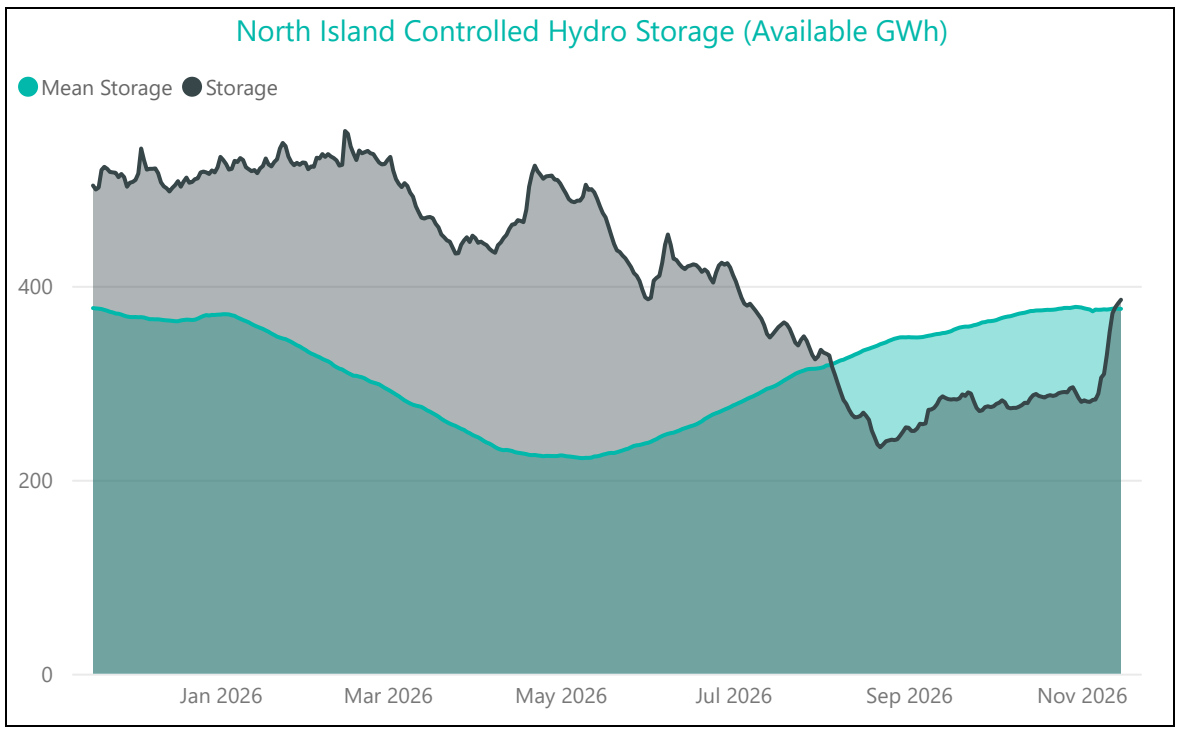


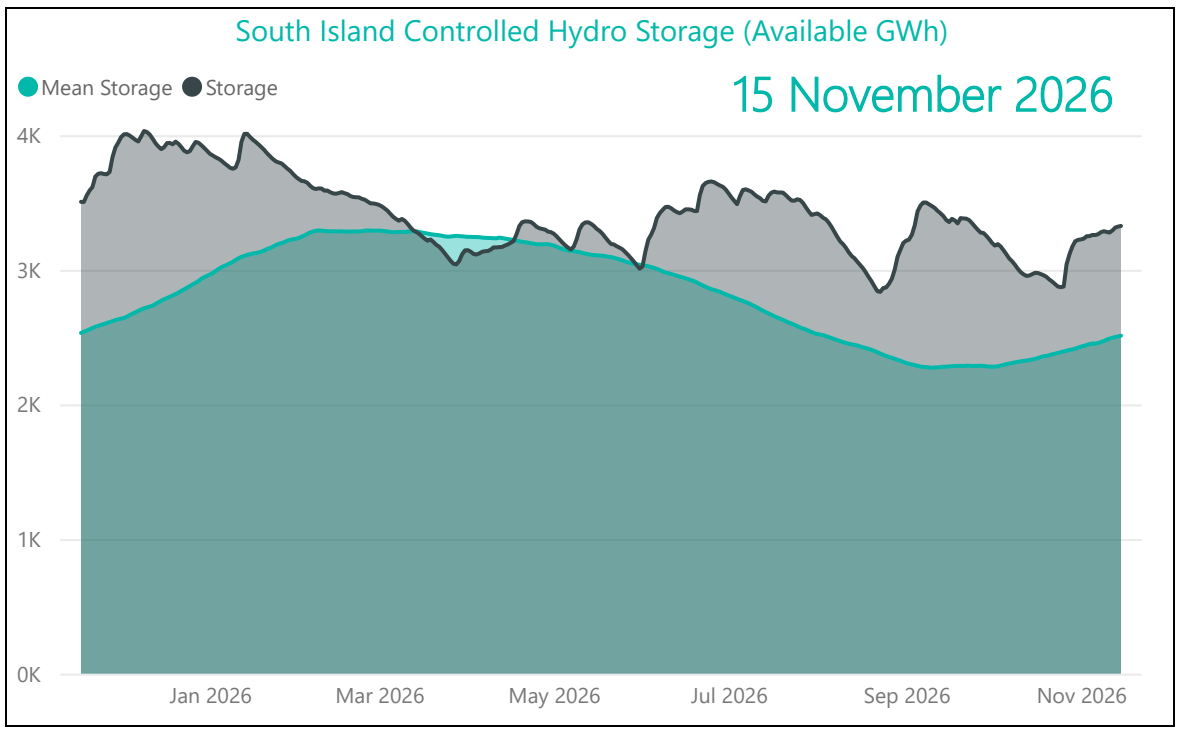
Average CO2 g/kWh

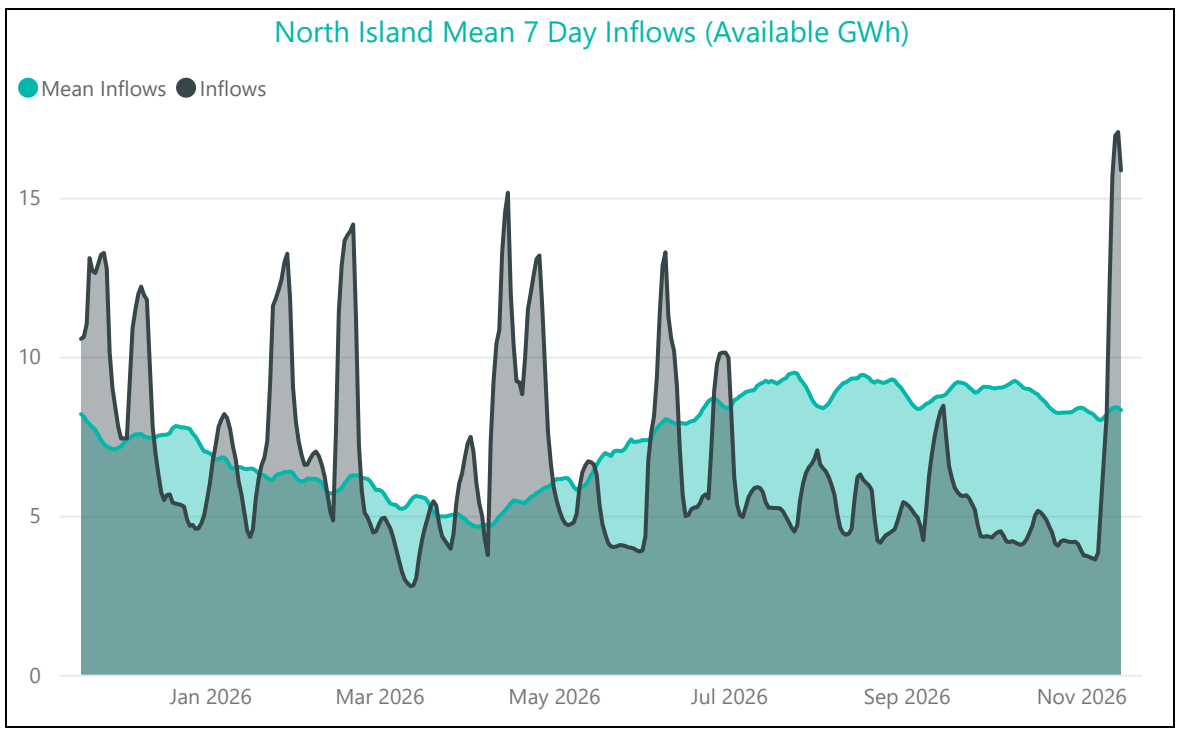


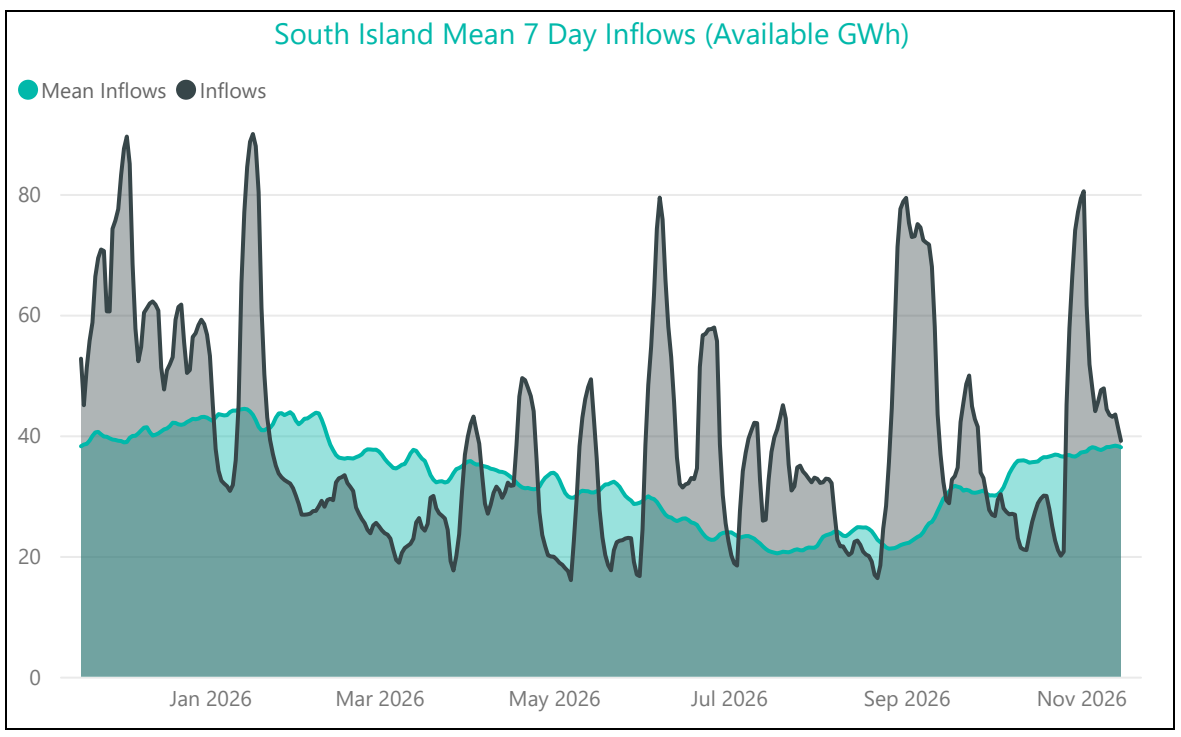
Hydro Storage











For further information on security of supply and Transpower's responsibilities as the System Operator, refer to our webpage here: https://www.transpower.co.nz/system-operator/security-supply

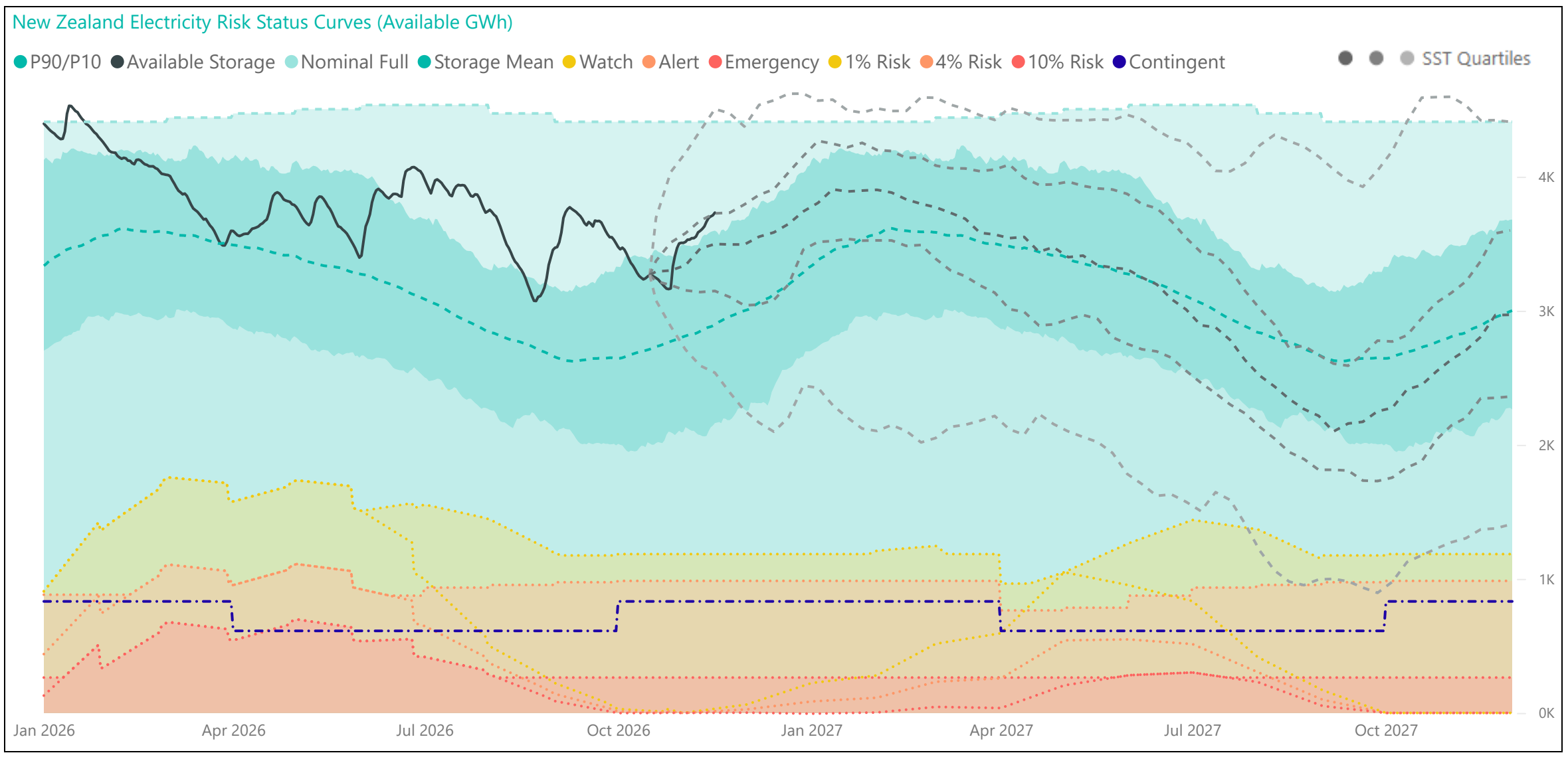
For any inquiries related to security of supply contact market.operations@transpower.co.nz

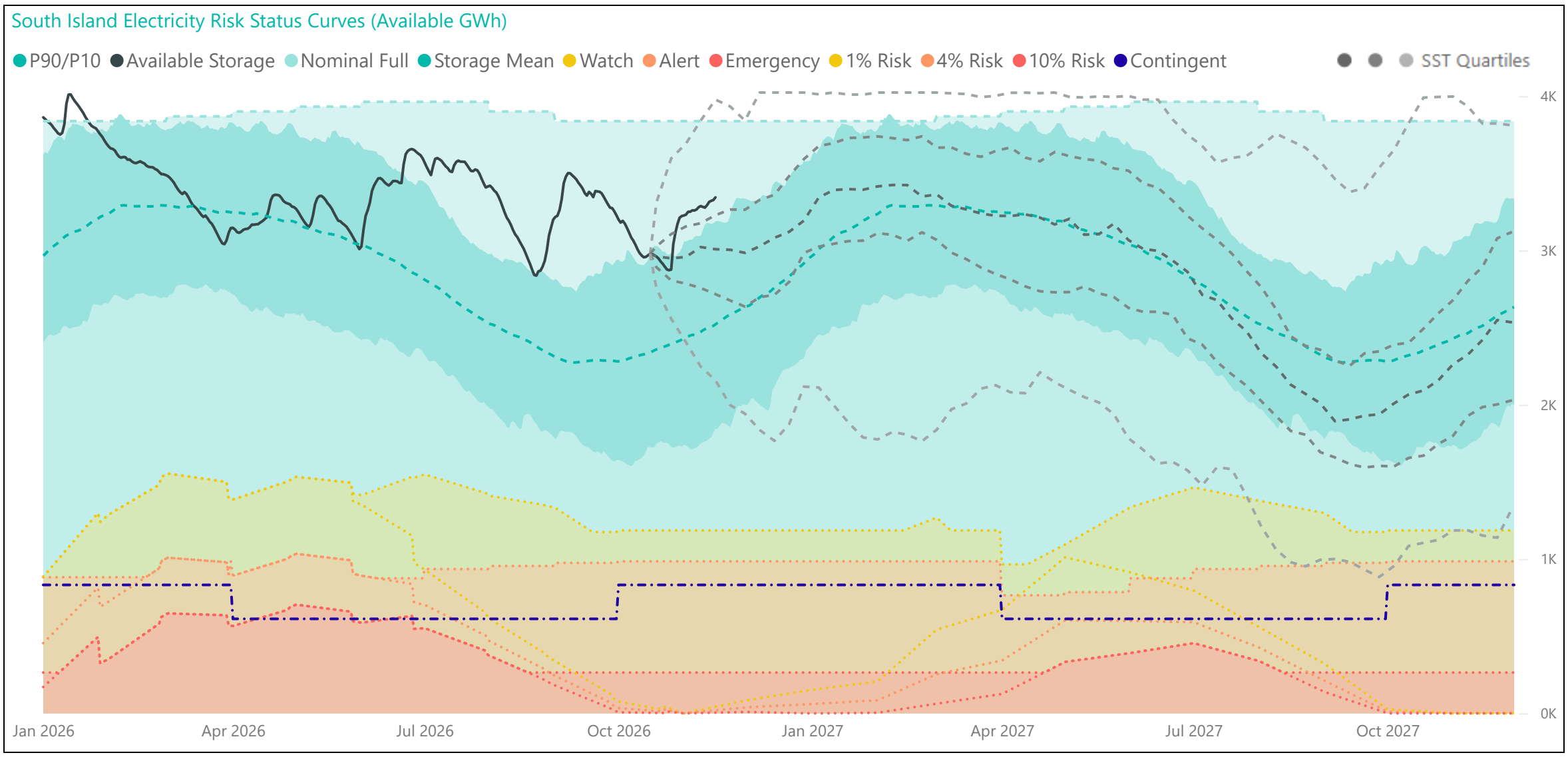
Hydro data used in this report is sourced from *NZX Hydro*.

Electricity risk curves have been developed for the purposes of reflecting the risk of extended energy shortages in a straightforward way, using a standardised set of assumptions.

Further information on the methodology of modelling electricity risk curves may be found here: https://www.transpower.co.nz/system-operator/security-supply/hydro-risk-curves-explanation

Electricity Risk Curves





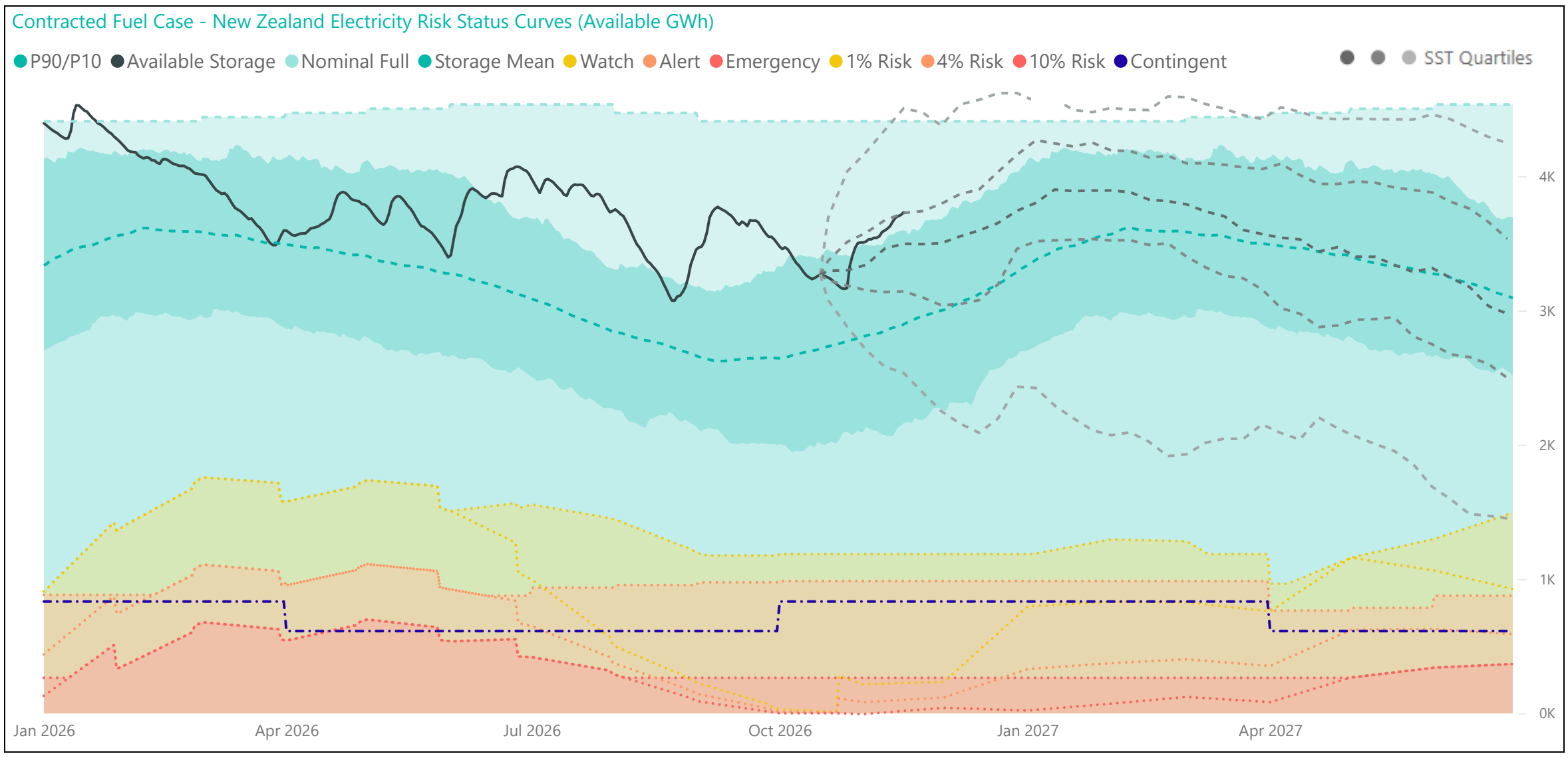
Electricity Risk Curve Explanation:

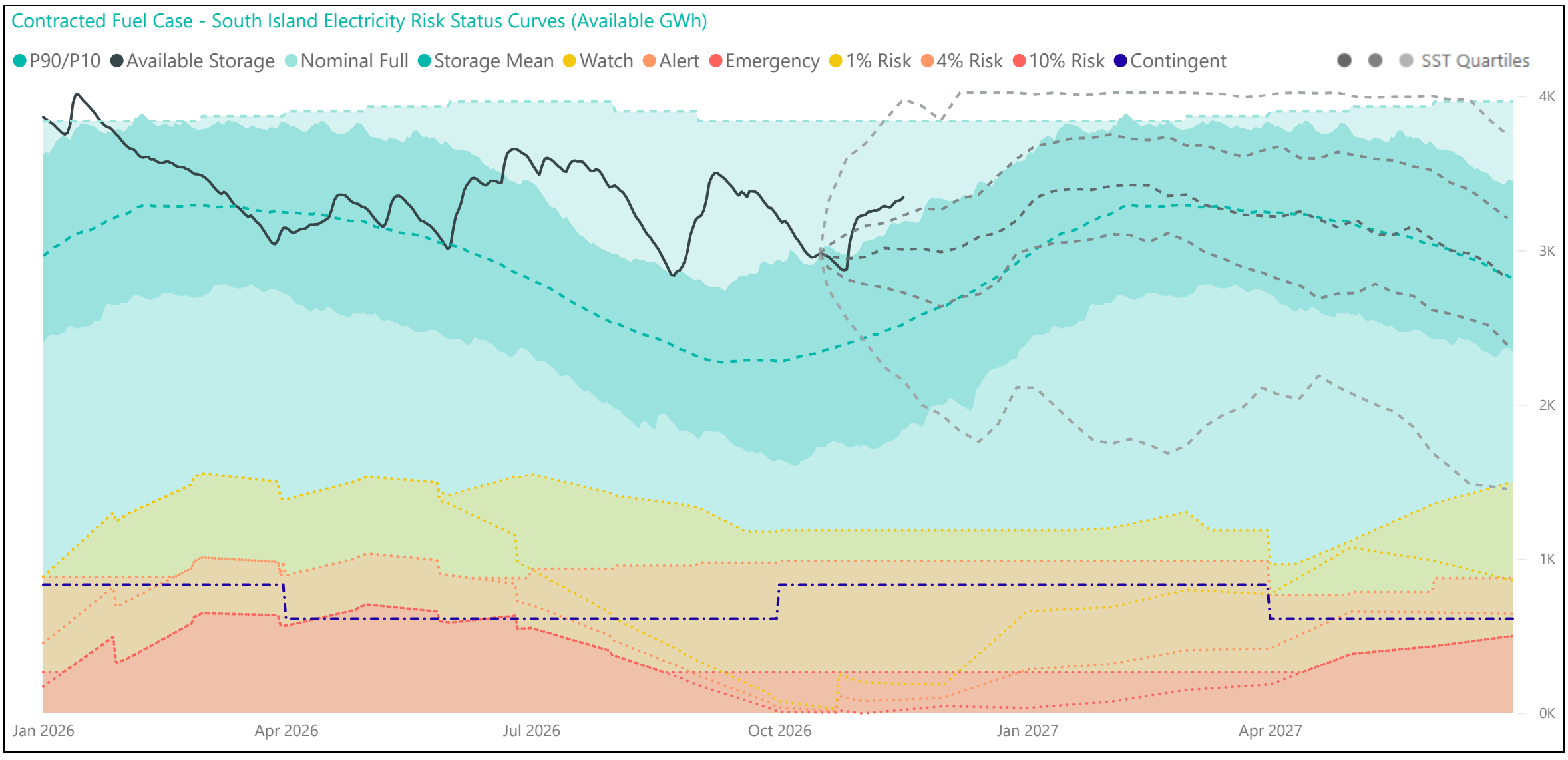
Watch Curve - The maximum of the one percent risk curve or the Alert curve plus the greater of the Watch adder or the worst-case simulated storage drop
Alert Curve - The maximum of the four percent risk curve and the floor and buffer
Emergency Curve - The maximum of the 10 percent risk curve and the floor and buffer
Official Conservation Campaign Start - The Emergency Curve
Official Conservation Campaign Stop - The maximum of the eight percent risk curve and the floor and buffer

Note: The floor is equal to the amount of contingent hydro storage that is linked to the specific electricity risk curve, plus the amount of contingent hydro storage linked to electricity risk curves representing higher levels of risk of future shortage, if any, and the buffer as specified in the SOSFIP.

The dashed grey lines represent the minimum, lower quartile, median, upper quartile and the maximum range of the simulated storage trajectories (SSTs). These will be updated with each Electricity Risk Curve update (monthly).

Electricity Risk Curves - Contracted Fuel Case





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